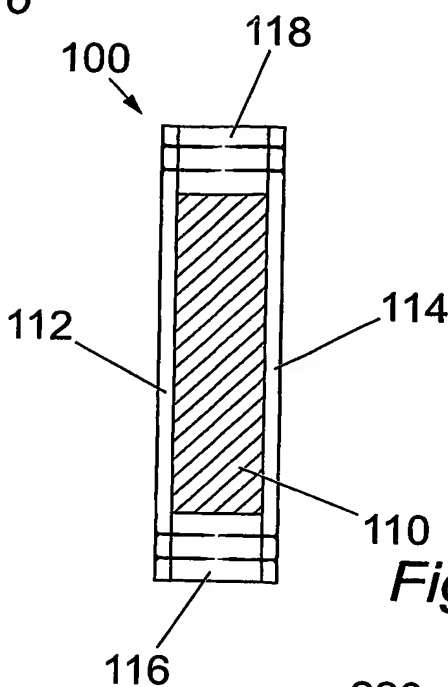Fig. 1

Fig. 2

Fig. 3a

Fig. 3b

Fig. 4a
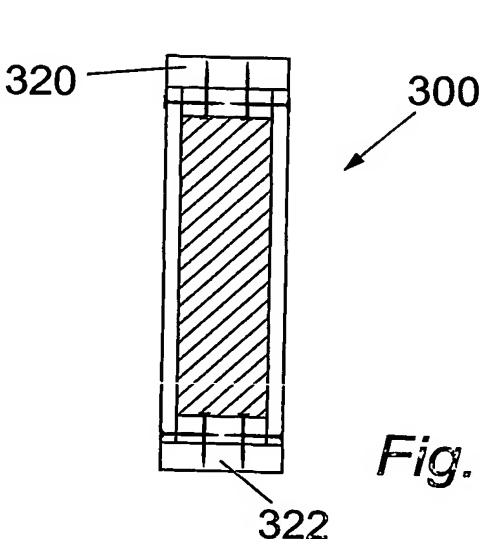
Fig. 4b
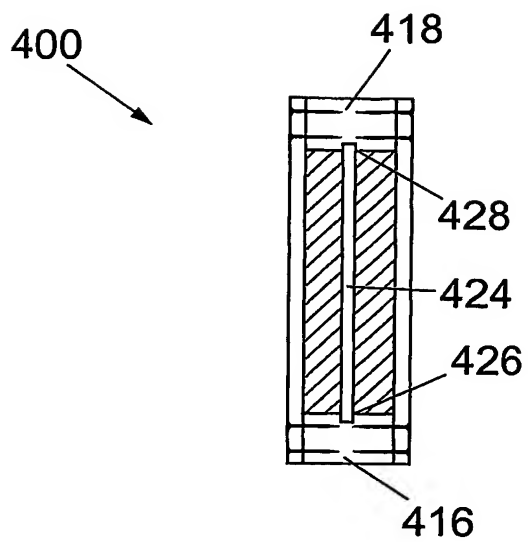
400

418

428

424

426

416

Fig. 5a

400

418

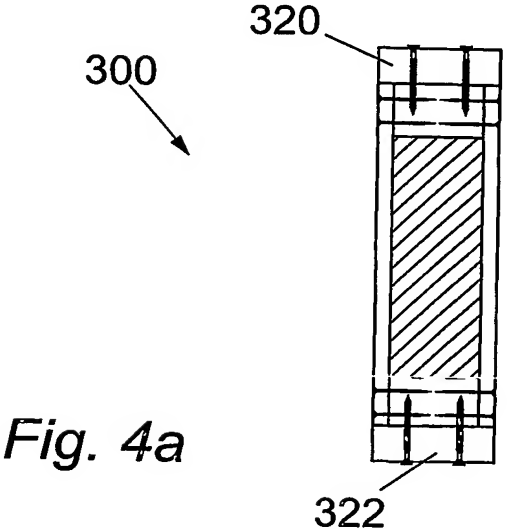428

424

424

426

416

Fig. 5b

Fig. 5c

Fig. 5d

500

513

112

114

Fig. 6a

100

500

513

515

112

114

Fig. 6b

600

618

610

612

614

616

Fig. 7

718

700

710

712

714

716

Fig. 8

800

818

824a   826a

812   814

810

Fig. 9   824b   816   826b

900

925

910

927

Fig. 10

1000

1018

1012   1014

1010

1016

Fig. 11

1100

1101   1103

1102   1104
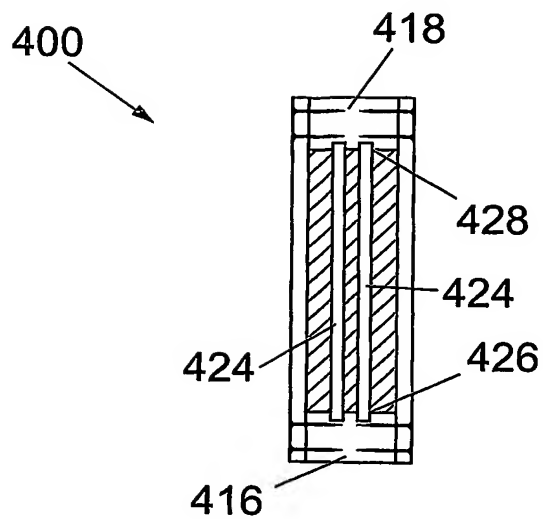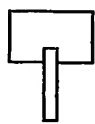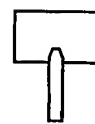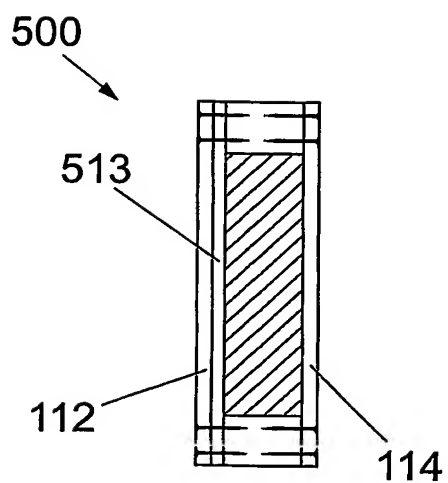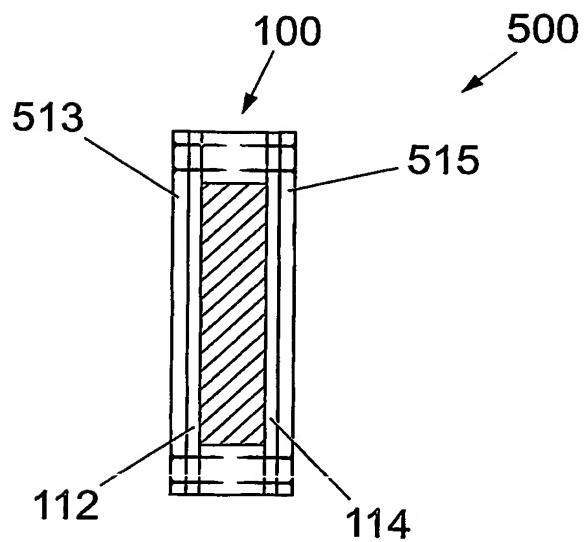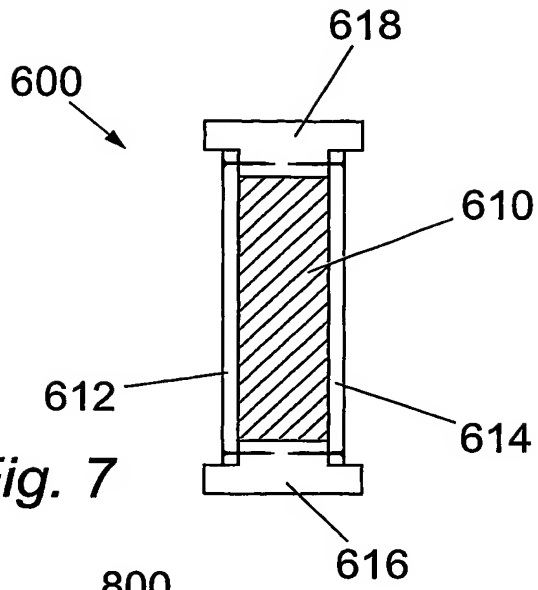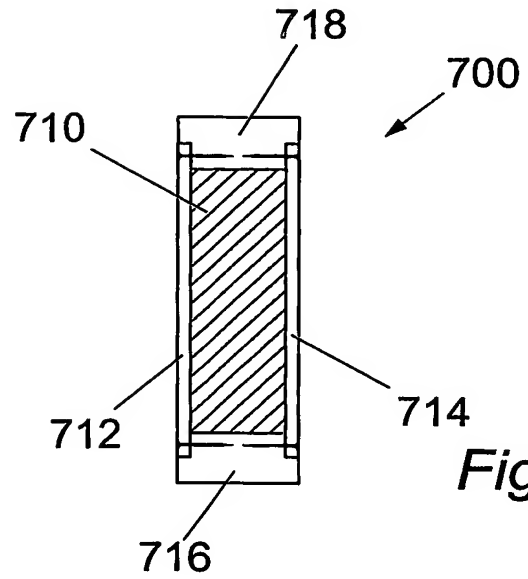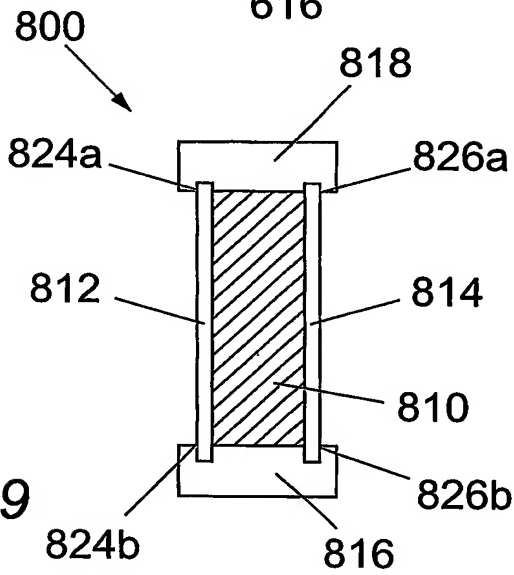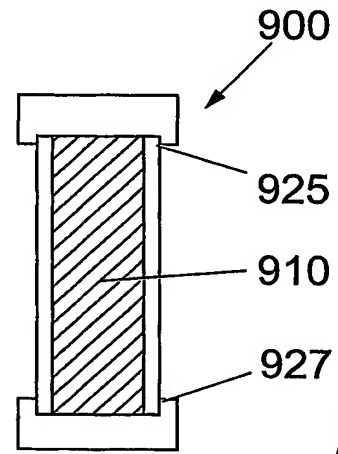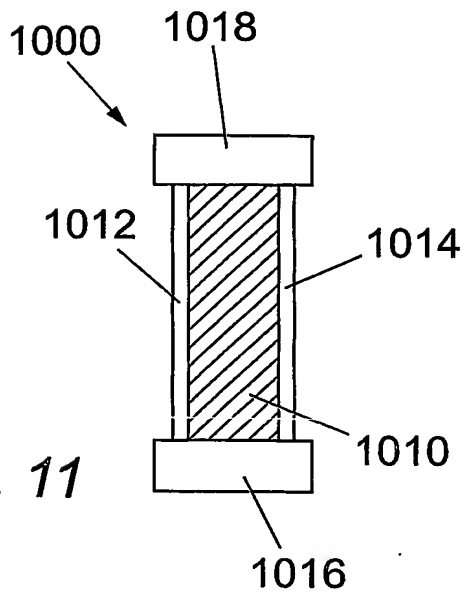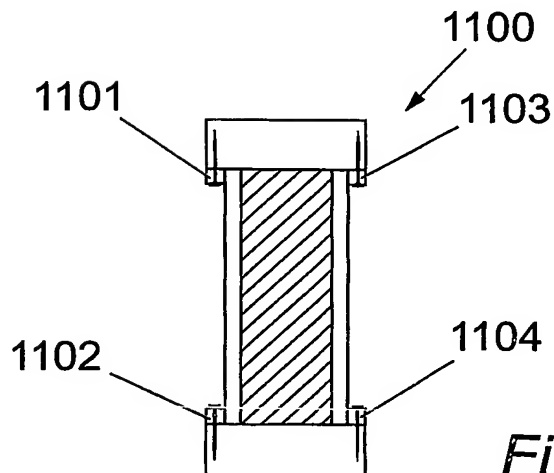
Fig. 12
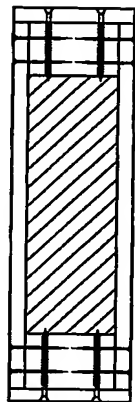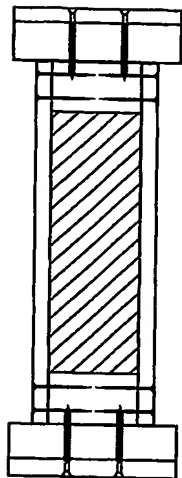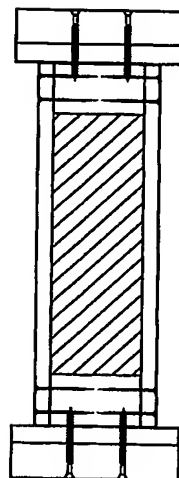
Fig. 13a   Fig. 13b   Fig. 13c
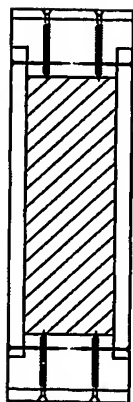
Fig. 13d   Fig. 13e   Fig. 13f
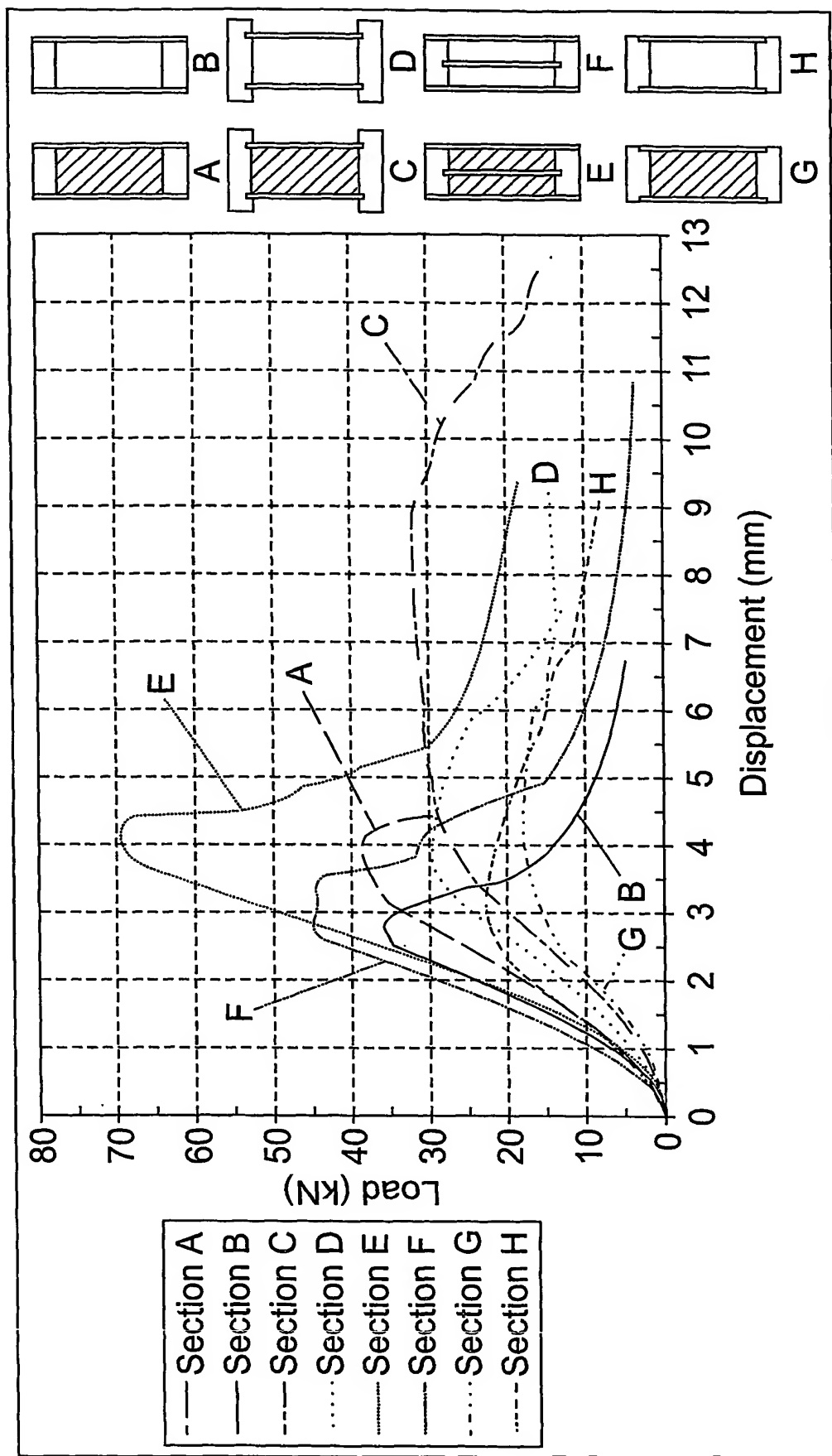
Fig. 14

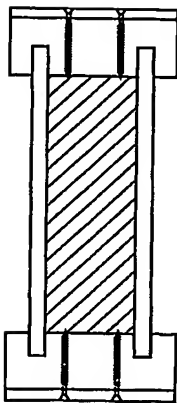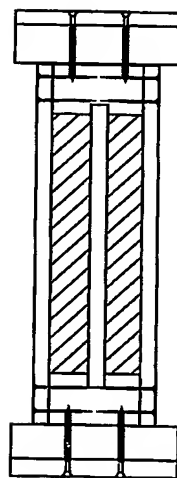| Criterion	LVL	Parallam	Glulam	I-Joist	Box Beam	Structural Support Beam of Present Invention
Span	7	7	10	6	10	10
Strength	6	10	10	2	4	10
Stiffness	6	10	8	5	6	10
Appearance	8	10	9	0	5	5
Weight	0	0	0	10	10	10
Environment issue	-5	-5	0	0	5	4
Cost	-8	-10	-5	5	10	10
Connectability	6	5	10	0	6	6
Ease of use	6	6	8	-5	5	10
Size limitation	8	4	10	5	10	10
Dimensional stability	10	10	8	0	5	10
Availability in UK	0	0	7	10	5	10
Total	44	47	75	38	81	105

Indicators are: -10 is the most negative and +10 is the most positive.

Fig. 15